

Federal Design Matters

An exchange of information and ideas related to federal design

National Endowment
for the Arts



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Mickey's 50th anniversary recalls Disney designers' wartime contributions



This guest of honor received long-deserved recognition at a White House reception last November



Mickey Mouse in the poster at left warned World War II civil defense leaders against complacency. During the same war, Donald Duck, shown in a still from a Disney film made for the government, exhorted taxpayers to pay Uncle Sam promptly and cheerfully

Largely ignored in the avalanche of 50th anniversary tributes to Mickey Mouse, his cartoon associates, and their prolific creator is the meritorious service they performed for the U.S. Government in World War II.

Walt Disney's wartime films can be classified into at least three types: 1) psychological films, 2) films exhorting citizens to support the war effort, and 3) military training films.

Of the psychological films, *Der Fuehrer's Face* is clearly the best-remembered. This stinging satire encapsulated all the irreverence most of the Allied world felt toward the arrogant regimentation Adolph Hitler imposed on Nazi Germany and tried, vainly, to impose on the rest of the world.

Completed in 1942, the film earned Disney the Academy Award for best animated short subject.

A series of satirical films were produced under a contract between Disney Studio and the Coordinator of Inter-American Affairs, which also called for short subjects designed to enhance the United States' image in Latin America.

The message of films designed to inspire homefront support of the war was more straight-forward. *Out of the Frying Pan into the Firing Line* urged housewives to contribute waste cooking fats for the manufacture of munitions. *The New Spirit* urged citizens to pay their federal income taxes promptly to support the expanding military budget.

In training films, Disney Studio deployed animators who had enthralled movie-theater patrons with *Snow White* and *Pinocchio* to help the Armed Forces teach citizen soldiers and sailors to use weapons and complex military equipment. Such films were designed to develop procedures for aircraft identification, teach riveting and welding, simplify map reading, and train mechanics in aircraft engine maintenance. This listing includes just a few of the types of films included in the more than 200,000 feet of film Disney produced under federal contract in fiscal 1943. By that year government work accounted for 94 percent of his company's film-making capacity, a statistic that moved a motion-picture professional journal to title an article about this activity. "Walt Disney Studio—A War Plant."

For this brief description of Disney's work for the government *Federal Design Matters* is indebted to an article titled, *Donald Duck Joins Up: The Walt Disney Studio During World War II*. The article is an excerpt from a carefully researched doctoral dissertation by Rick Shale.



These symbols are among 30 being tested by the Center for Building Technology

NBS research center gives designers scientific base

Federal designers benefit in significant, if indirect, ways from the work of the 230-person staff of the Center for Building Technology on the sprawling campus of the National Bureau of Standards in Gaithersburg, Maryland.

The testing and evaluation that takes place in the Center's laboratories and offices provides sound, scientific underpinning for the standards, codes, regulations, and guidelines that designers routinely accept as givens.

Establishing standards that enable manufacturers to make floor covering that will not exceed the safety limits of slipperiness is one of the myriad responsibilities of the Center. The Center recently developed a machine for testing slipperiness, called the NBS-Brumgraber tester. Now the manufacturers of floor tiles, bathtubs, shower stalls and other products that might cause slips and falls must meet standards established by tests done on this equipment. As justification for carrying out this meticulous testing process,

the Center's Francis Ventre cites the fact that injuries from slips and falls constitute the second most frequent cause of accidental death in the nation.

Dr. Ventre is chief of the Center's Environmental Design Research Division, one of four divisions of the Center. The division's studies are concentrated on architecture, site planning, occupant safety, and the sensory environment, including visual communications, color, and acoustics.

The Center's divisions carry out much of their research in large laboratories, including a chamber that can test the thermal performance of full-scale houses and a five-story plumbing research laboratory. Of the Center's budget of about \$14 million for fiscal 1978, approximately three-fourths comes from other federal agencies for which the Center performs research.

Many of the standards being developed by the Center for Building Technology grow out of institutions' efforts to respond to national priorities. The national need to conserve energy, for example, has forced the research

teams to ask the same kinds of questions designers are asking: "What levels of light do people need for performing various tasks? What size, shape, shading, and glass tint are preferable for window design? What kinds of colors should be used to ensure optimum use of light when there is a need to reduce wattage in building corridors? In response, the Center is developing electronic systems to measure effects of illumination levels on human performance of tasks approximating those in living spaces and workplaces.

In another study the Center measured the psychological reaction to environments with and without windows. Moreover, the Center is investigating how humans behave during fires, including how they perceive signs de-

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The nearly cubical shape of the Norris Cotton Federal Building in Manchester, New Hampshire, and the windowless north wall minimize heat loss from the surface.



Using portable equipment he developed, Dr. Robert Brumgraber of the Center for Building Technology tests the slipperiness of a suds-filled bathtub.

"... the federal government is not only one of the major builders but one of the major influences on building in this country. Today the quality of the built environment is as much a product of public endeavor as it is of private endeavor." Michael Pittas

A new director reflects on the design process

"I believe the Architecture, Planning and Design Program of the Endowment must become more ecumenical and more effectively involve all of the design fields it was meant to serve."

In this statement to the National Council on the Arts, the Arts Endowment's advisory body, Michael John Pittas, newly appointed director of the program, apparently expressed a viewpoint shaped by his service as a city planner, an educator, and a design practitioner.

Named to the post last month by Endowment Chairman Livingston L. Biddle, Jr., Pittas has been an associate professor and acting director of the Urban Design Program at Harvard's Graduate School of Design. As director of Planning and Development for Trenton, N.J., he coordinated a full range of community planning and development programs. As director of the Office of Comprehensive Planning for New York City, he supervised the central planning staff units, including those responsible for economic development and social service.

Biddle also named Charles B. Zucker as assistant director of the program. Zucker, 35, has been a planning consultant and educator and has taught at Rutgers University, City College of New York and Anne Arundel Community College in Maryland. He was an editor/writer on the American Institute of Architects (AIA) Research Corporation project entitled "Community Energy Design for Community Participation" which will be published in 1979.

In a Federal Design Matters interview before he assumed his new duties Pittas offered some comments "as an outsider looking in." Some of them follow:

The constituency for the Architecture, Planning and Design Program is the largest for any of the Endowment's programs. Yet it is the most diffuse and the least focused on its particular needs. I'm going to be particularly concerned about identifying the variety of interests that form this constituency and proposing new directions sensitive to the design field.

Another issue that concerns me is the degree to which the activities of the Architecture Program are integrated with the other programs of the Endowment. I believe that there is room for cooperative ventures.

There's little doubt that the Program's seed money grants have responded to a very

diverse set of interests in the fields of research, education, and community planning ... Often these grantees have only scratched the surface and been able to find further support necessary to really go into depth. My preliminary impression is that the Program ought to be examining the possibility of second generation grants on a limited basis to allow certain grant recipients to develop their work further.



Michael John Pittas



Charles B. Zucker

The thing that I find most regrettable is that the portion of the program that dealt with improving federal architecture has lost its original impetus. I would like to see that particular effort revived. After all, the federal government is not only one of the major builders but one of the major influences on building in this country. Today the quality of the built environment is as much a product of public endeavor as it is of private endeavor.

It is my understanding that Lois Craig and the staff on the Federal Architecture Project did an excellent job of defining what constitutes high quality federal design. The issue to me would be to take this preparatory work and help to make it operational.

Architectural competitions offer a potentially productive new direction for achieving design excellence in cultural facilities. Recently, I observed the competition sponsored by the National Arts Endowment and the Massachusetts Arts and Humanities Council for the redesign of the Provincetown Playhouse on Cape Cod. Not only did the client get a great deal of design input from the ten design firms competing, but the community was intimately involved with the designers as they worked. The competitors were brought to the community and prepared their designs in a building that was open to the public. I was told that over 800 local residents participated by advising the architects during the design process. The end result was not only a theater which met the requirements of the performing arts from a technical point of view but one that also met the community's needs. I don't see any reason why architectural competitions shouldn't be sponsored for challenge grants under the cultural facilities program of the Endowment. Such a program illustrates what I mean by joint ventures with the Endowment's other programs.

Architecture, landscape architecture, planning, urban design, graphic design, interior design, industrial design, and fashion design constitute the fields served by the Architecture Program. They are all fields of applied art. Their products must not only be pleasing to the senses but must serve useful human purposes. Their common meeting ground is more than the utility of the artifacts they create. It is the commonality of design process which binds them together. It is this synergy which may form the future direction of the Endowment's efforts.

"Our report will seek to counter misconceptions that equate design with appearance. It will advocate that the principles of good design be applied at every stage of any federal process for delivering goods and services." David Dibner

Task force studies effect of federal policy on design

Recommendations of a task force on design will be included in a review of federal cultural policy to be submitted to President Carter in mid-February. The General Services Administration is the lead agency for the panel, one of five contributing to the review. GSA Administrator Jay Solomon has named David R. Dibner, the agency's assistant commissioner for construction management, as chairman.

The study of federal cultural policy is being made at the request of the President under direction of Stuart E. Eizenstat, assistant for domestic affairs and policy. Task force efforts are being coordinated by the Federal Council on the Arts and the Humanities.



David R. Dibner

The design task force's mission is to "determine the direct and indirect consequences of federal policy on the quality of design in building, transportation systems, recreational facilities, community development, graphic communication, and public works projects of all kinds. The review will encompass a concern for significant relationships with the natural environment, preservation of vital links to history through historic preservation, and the cultural value of wildernesses."

Dibner said the design panel will evaluate the effectiveness of existing federal programs that affect design and will suggest new policy directions for these and future design-related programs.

"Our report," he added, "will seek to counter misconceptions that equate design with appearance. It will advocate that the principles of good design be applied at every stage of any federal process for delivering goods and services."

The task force consists of 15 other members representing nine other federal departments and agencies. They are Hope T. Moore and Wallace Macnow, Interior; Robert Thurber and Martin Convisser, Department of Transportation; Roy F. Knight and Phillip M. Kadis, National Endowment for the Arts; Ellen Elow, Andrew Euston, and William Millkey, Department of Housing and Urban Development; Edwin Dorn, Health, Education and Welfare; Robert Peck, Federal Council on the Arts and the

Humanities; Mortimer Marshall, Defense Department; J. Walter Roth and Erma Striner, GSA, and Michael Kane, Council on Environmental Quality.

To gain broader insight for its deliberations the task force sent questionnaires to more than 40 other agencies, organizations, and professional societies, soliciting their views about existing programs and asking their proposals for possible new federal initiatives.

The subjects to be considered by other task forces and their lead agencies are: Careers in Culture, Department of Labor; Cultural Facilities and Resources, HEW; International Cultural Programs, International Communications Agency, and the Media in Culture, the White House Domestic Policy Staff.

PADC chooses designs for National Theatre block and Willard Hotel

All but the earliest designers of a revitalized Pennsylvania Avenue in the nation's capital have sought to temper the monumentality of this ceremonial corridor with the kinds of diverse attractions that make our most interesting cities vibrant places.

To that end the present staff of the Pennsylvania Avenue Development Corporation envisions nearly a million square feet of space on the Avenue for such facilities as galleries, specialty shops, and restaurants. Four million square feet of new office space and some 1,500 new housing units, they feel, will guarantee a good daytime mix of permanent residents and office workers with the perennial waves of tourists. The addition of night clubs and additional theaters may even fulfill urban planners' repeated promises of life after dark.

With the selection of teams to redevelop the block containing the venerable National Theatre and to renovate the Willard Hotel, the Corporation has taken a long stride toward these important goals.

PADC selected Quadrangle Development Corporation, The Marriott Corporation, and the Rouse Company, to develop the site between 13th and 14th Streets, N.W. The developers will build a sixteen-story, mixed-use complex designed by Frank Schlesinger, F.A.I.A., Washington, and Mitchell/Giurgola, Philadelphia. The building will contain an 820-room hotel, 100,000 square feet of retail and 450,000 square feet of office space, 760 underground parking spaces. The 1600-seat National Theatre will stay intact. The overall project will cost an estimated \$110 million and is expected to be completed in 1983.

The design features a multi-level mall with ac-

cess from Pennsylvania Avenue, F Street, 13th and 14th Streets, and direct pedestrian linkage to the National and the hotel. Ground floor retail space will be accessible from all surrounding streets and through a central atrium.

With this, its first offering of commercial property, the Corporation rounds out the National Theatre block. Quadrangle Corporation is already building an office building adjacent to the National at the northwest corner of 13th and E Streets.

To return the Willard to its original elegance, the board of PADC selected Florida builder Stuart S. Golding, the Fairmont Hotels Corp. of San Francisco, and architects Hardy, Holzman & Pfeiffer of New York. Their plans, chosen from among those submitted by 10 competitors, call for a hotel annex that will be compatible in design with the Willard's Beaux-Arts style. They also call for a courtyard along Pennsylvania Avenue that will be lined with shops. The project is expected to cost \$50 million and be completed in 1982.

PADC approved a resolution limiting the height of buildings on three city blocks west of the FBI building (Squares 291, 322, and 348) to 160 feet, inclusive of all permanent roof structures except stairway penthouses, atrium skylights, cornices, and architectural embellishments. In addition, development on these blocks will be limited to a maximum floor area of ratio of 11.0. Formerly, roof-top structures not exceeding 18 feet were permitted above 160 feet and a potential FAR limit of 12.0 was possible.

EPA saves \$300,000 on redesign of manual

Redesigning of a pesticide-instruction handbook to conform to the Environmental Protection Agency graphic standards manual resulted in a \$300,000 saving, according to Robert Flanagan, chief graphic designer in EPA's Office of Public Awareness.

The publication's format was changed from two columns of ten-point type to three columns of nine-point type and many full-page illustrations were reduced to one or two columns when it was determined that they would communicate as effectively in a smaller size. The pesticide manual thus was reduced from 84 pages to 44 pages and the production cost from 70 cents a copy on an initial run of one million to 40 cents a copy—a savings of \$300,000.

The graphics manual was compiled by designers Chermayeff & Geismar as part of a graphics standardization program for EPA.

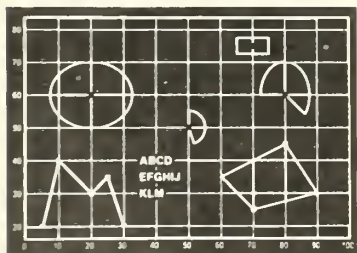
Design briefs:



Spandrel at Pension Building doorway.



Section of Pension Building frieze.



Genographics display

Building arts museum . . . A joint congressional resolution to study establishment of a National Museum for the Building Arts was signed by the President November 4. The resolution initiates studies on the feasibility of converting the Pension Building into the museum and is aimed at securing responses from those active in the building arts. The building arts include all practical and scholarly aspects of architecture, landscape architecture, engineering, building and construction, urban planning and design, physical development and renewal, and historic preservation. The Committee for a National Museum of the Building Arts, Suite 400, South, 1800 M Street, N.W., Washington, D.C. 20036 will send a copy of the museum proposal to those making tax-deductible contributions to the committee of at least \$5.

Automation for graphic design . . . Genographics—an interactive computer system that creates graphics for slide art—is being used by the Central Intelligence Agency and the National Security Agency. The Department of Energy, the Pentagon, and Wright Patterson Air Force Base's Foreign Technology Division plan to install similar computer systems. The system, developed by General Electric, enables an artist to do a complete layout on a TV screen, store the layout on discs, and retrieve it for revisions.

An artist can use the screen to create or call up preexisting symbols or layouts, do illustrations, change and manipulate stored data, change colors and sizes of layouts and symbols. The stored data can be transferred to film and turned into slides for visual presentations.

The system can be linked up with TV systems, can transmit data over phone lines, and can program additional items into the original system with a remote terminal. One person using the

system can accomplish as much as four or five persons using traditional methods, according to Murray Lee, chief of CIA's visual information and design.

Federal architects . . . The American Institute of Architects is working with the Civil Service Commission to update standards for federal architects. AIA wants CSC to rewrite its career standards to mandate that all federal architectural jobs be held by licensed professionals above a GS-11 rating. The Institute hopes this will encourage federal architects currently not licensed to apply for licenses and bring federal standards up to those used by state licensing boards. During the past 14 years, a number of architectural graduates have taken advantage of the Navy Department's architectural intern program to earn their credentials as architects. The Navy's goal is to provide well-rounded experience for architectural graduates so they are fully qualified to take registration examinations, according to Ron Johnson, a Navy spokesman. He said the interns are actually sent out on construction sites where they serve as inspectors for six months.

Air Force conference . . . Some 100 senior architects, engineers, and guests from government and industry attended the 1978 Air Force Systems Command Design Conference at Andrews Air Force Base December 4-8. The conference included sessions on open space office planning, signage and graphics, designing for the handicapped, housing, and the building of commissaries.

New publication . . . *Grids: Their meaning and use for federal designers* by Massimo Vignelli is the latest publication of Federal Design Library, a series presenting information and ideas about federal design. This 39-page, illustrated publication is based on a presentation by Vig-

nelli at the Second Studio Seminar for Federal Graphic Designers at the Illinois Institute of Technology. The graphic and industrial designer heads a firm that has offices in New York, Paris, and Milan. *Grids* is for sale for \$1.60 by the Superintendent of Documents, U.S. Government Printing Office, Stock No. 036-000-00038-4.

Document design . . . The American Institutes for Research has begun a document design project to promote clear and simple writing and design of public documents. Funding for the three-year project is being provided by the National Institute of Education. AIR will work with Carnegie-Mellon University and Siegel & Gale, Inc., a private firm specializing in language simplification and language training. AIR will conduct research, provide information services and technical assistance on designing documents, and develop new college and graduate level writing and design training programs for the 1981 school year. Designers interested in more information should contact Dr. Janice C. Redish, Project Director, American Institutes for Research, 1055 Thomas Jefferson Street, N.W., Washington 20007. (202) 342-5000.

Chaparos appointment . . . Nicholas Chaparos, the Arts Endowment's coordinator of design information and education, has been named adjunct professor of design at Cooper-Union School of Art and Design in New York City. He will teach a course in which he will draw on a wide range of current federal design problems.

Questions or problems related to design?

Write Design Action Line, National Endowment for the Arts, Washington, D.C. 20506, if you have a design problem (or a solution to one).

NBS research center (continued from page 2)

signed to give emergency instructions. Such tests can provide vital information to graphics designers responsible for building signage.

Other research on the sensory environment deals with people's responses to noises. The results of this forms a rational basis for acoustical criteria for buildings. It has high potential value for the designer of an open-space office who must reconcile conflicting requirements in order to provide space that will permit visual contact while preserving a reasonable measure of speech privacy.

The Center does not confine its research to the kind of testing that can be done under laboratory conditions. With the General Services Administration and the Department of Energy, the Center is engaged in field studies on the energy conservation performance of a seven-story office building in Manchester, New Hampshire. The Norris Cotton Federal Building there is a "living laboratory" for testing and evaluating methods to conserve energy in office buildings. The monitoring of the building's performance is testing the effectiveness of such features as small, double-glazed windows, innovative climate-control equipment, and different lighting systems.

Evaluation of the building's performance extends to a study of the occupants' reactions to the innovative design features. In examining these reactions, through questionnaires and interviews, Bureau of Standards evaluators will have access to complaints filed by the occupants with the GSA Building Manager. The degree of correlation found between these two channels of expression is expected to be useful in making final judgments about building performance.

This evaluation is the most far-reaching of the Center's application of the practice of post-occupancy evaluation of buildings. A team from the Center was one of two groups taking part in an interagency post-occupancy evaluation project supported in part by a grant from the National Endowment for the Arts. This project included four major building types: a housing project for the severely disabled, designs to accommodate mail delivery and communication in housing for enlisted Army men, an NIH laboratory, and a courthouse and federal-office building. The primary focus of this series of studies was to explore the potential for linking knowledge and techniques of the physical and behavioral sciences with the design issues facing the design professions.

Urban environmental design: a concept becomes a force

For nearly two decades steady progress has been made in a movement to promote the integration of community-development forces—both public and private—to bring about optimal change in the environments of cities. Urban environmental design is the most widely accepted umbrella term for this process.

With regulations that make urban environmental design an eligible cost in federal Community Development Block Grants and a new program that will aid cities seeking to use the concept, the Department of Housing and Urban Development has taken a long stride toward making the practice of urban environmental design operational.

Andrew F. Euston, Jr., HUD's chief urban design officer, offers this definition of urban environmental design:

"The concept of urban environmental design shifts the focus from aesthetic design for its own sake to design focused on people, livability and quality of urban life.

"It is interdisciplinary in approach and focuses on the administrative and policy processes for improving the quality of new development, rehabilitation, restoration, and neighborhood preservation. Economic, social and behavioral analysis become equal elements with physical environmental design."

Revised guidelines for cities applying for Community Development Block Grants make funds available under these grants for establishment of "an administrative capacity to use a systematic, interdisciplinary approach to the integrated use of natural and social sciences and the environmental design arts and planning and decisionmaking." The authority for this ruling and much of its language is derived from the National Environmental Policy Act of 1969.

The new program in urban environmental design will be launched through a third-of-a-million dollar HUD contract with the National League of Cities. Under this project, Euston told mayors and other city officials, HUD will fund university research projects, support publication of materials about successful case studies of urban environmental design practices in local government, and provide technical assistance to communities.

Euston is coordinator of and will moderate a series of lectures beginning January 22 at the Smithsonian Institution that will explore the concepts of urban environmental design.

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